

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A flat-type display, comprising:

a first panel and a second panel which are bonded to each other in their circumferential portions and having a space between the first panel and the second panel, the space being in a vacuum state;

a spacer extending, as viewed in cross-section, longitudinally in the space between the first panel and the second panel to terminate in a first end spacer surface and an opposite second end spacer surface and laterally between a pair of spaced-apart spacer side walls to define a thickness therebetween;

a first electrode member fabricated as a unitary construction from an electrically-conductive material and extending across and connected to one of the first panel and the second panel, the first electrode member, as viewed in cross-section, formed with a recess having a pair of facially-opposing recess side walls and a recess bottom wall interconnecting the pair of recess side walls;

a second electrode member fabricated from an electrically-conductive material, extending across and connected to a remaining one of the first panel and the second panel;

a first low-melting-point metal layer and a second low-melting-point metal layer, each one of the first and second low-melting-point metal layers being fabricated from an electrically-conductive material having a low melting point; and

a first conductive material layer and a second conductive material layer, each one of the first and second conductive material layers being fabricated from an electrically-conductive material,

wherein the spacer electrically connects the first and second electrodes,

wherein ~~a first end portion of the spacer is~~ the first end spacer surface, the first conductive material layer and the first low-melting-point metal layer are disposed in the recess with the first conductive material layer disposed on-between and in contact with the first end spacer surface and the first low-melting-point metal layer and the first low-melting-point metal layer being in contact with and disposed between the first conductive material

layer and the recess bottom wall and

wherein each one of the pair of recess side walls is in contact with the first conductive material layer and the first low-melting-point metal layer while the pair of spacer side walls at the a first end portion of the spacer positioned inside the recess is being spaced apart from the pair of recess side walls.

2. (Original) The flat-type display according to claim 1, in which the spacer is formed of ceramics or glass.

3. (Original) The flat-type display according to claim 1, in which the first panel and the second panel are bonded to each other in their circumferential portions through a bonding layer made of frit glass.

4. (Original) The flat-type display according to claim 1, in which the first panel and the second panel are bonded to each other in their circumferential portions through a bonding layer made of a low-melting-point metal material.

5. (Original) The flat-type display according to claim 1, in which
the flat-type display is a cold cathode field emission display,
the first panel is an anode panel in which an anode electrode and a phosphor layer are formed, and,
the second panel is a cathode panel in which a plurality of cold cathode field emission devices are formed.

6. (Previously Presented) The flat-type display according to claim 1, in which
a plurality of recesses for receiving the first end portion of the spacer are formed in the first panel and/or the second panel.

7. (Original) The flat-type display according to claim 6, in which the spacer is formed of ceramics or glass.

8. (Original) The flat-type display according to claim 6, in which the first panel and the second panel are bonded to each other in their circumferential portions through a bonding layer made of frit glass.

9. (Original) The flat-type display according to claim 6, in which the first panel and the second panel are bonded to each other in their circumferential portions through a bonding layer made of a low-melting-point metal material.

10. (Original) The flat-type display according to claim 6, in which the flat-type display is a cold cathode field emission display, the first panel is an anode panel in which an anode electrode and a phosphor layer are formed, and, the second panel is a cathode panel in which a plurality of cold cathode field emission devices are formed.

11. (Currently Amended) A method for manufacturing a flat-type display, said flat-type display comprising a first panel and a second panel bonded to each other in their circumferential portions and having a space between the first panel and the second panel, the space being in a vacuum state, a spacer extending, as viewed in cross-section, longitudinally in the space between the first panel and the second panel to terminate in a first end spacer surface and an opposite second end spacer surface and laterally between a pair of spaced-apart spacer side walls to define a thickness therebetween, a first electrode member fabricated as a unitary construction from an electrically-conductive material and extending across and connected to one of the first panel and the second panel with the first electrode member, as viewed in cross-section, formed with a recess having a pair of facially-opposing recess side walls and a recess bottom wall interconnecting the pair of recess side walls, a second electrode member fabricated from an electrically-conductive material, extending across and connected to a remaining one of the first panel and the second panel, a first low-melting-point metal layer and a second low-melting-point metal layer with each one of the first and second low-melting-point metal layers

being fabricated from an electrically-conductive material having a low melting point and a first conductive material layer and a second conductive material layers with each one of the first and second conductive material layers being fabricated from an electrically-conductive material, with the spacer electrically connecting the first and second electrodes, the method comprising the steps of:

~~positioning a first end portion of the spacer~~ the first end spacer surface, the first conductive material layer and the first low-melting-point metal layer in the recess with the first conductive material layer disposed ~~on~~ between and in contact with the first end spacer surface and the first low-melting-point metal layer and the first low-melting-point metal layer being in contact with and disposed between the first conductive material layer and the recess bottom wall and each one of the pair of recess side walls being in contact with the first conductive material layer and the first low-melting-point metal layer while the pair of spacer side walls at ~~the a~~ a first end portion of the spacer positioned inside the recess is being spaced apart from the pair of recess side walls;

positioning the second conductive material layer on the second end spacer surface; and

positioning the second low-melting-point metal layer in contact with and between the second conductive material layer and second electrode member.

12. (Original) The method for manufacturing a flat-type display according to claim 11, in which the spacer is formed of ceramics or glass.

13. (Original) The method for manufacturing a flat-type display according to claim 11, in which the first panel and the second panel are bonded to each other in their circumferential portions through a bonding layer made of frit glass.

14. (Original) The method for manufacturing a flat-type display according to claim 11, in which the first panel and the second panel are bonded to each other in their circumferential portions through a bonding layer made of a low-melting-point metal material.

15. (Original) The method for manufacturing a flat-type display according to claim

11, in which

the flat-type display is a cold cathode field emission display,

the first panel is an anode panel in which an anode electrode and a phosphor layer are formed, and,

the second panel is a cathode panel in which a plurality of cold cathode field emission devices are formed.

16. (Original) The method for manufacturing a flat-type display according to claim 11, in which

the flat-type display is a cold cathode field emission display,

the first panel is a cathode panel in which a plurality of cold cathode field emission devices are formed, and,

the second panel is an anode panel in which an anode electrode and a phosphor layer are formed.

17. - 22. (Canceled)

23. (Previously Presented) The method for manufacturing a flat-type display according to claim 11, in which a plurality of recesses for receiving the first end portion of the spacer are formed in the first panel and/or the second panel.

24. (Original) The method for manufacturing a flat-type display according to claim 23, in which the spacer is formed of ceramics or glass.

25. (Original) The method for manufacturing a flat-type display according to claim 23, in which the first panel and the second panel are bonded to each other in their circumferential portions through a bonding layer made of frit glass.

26. (Original) The method for manufacturing a flat-type display according to claim 23, in which the first panel and the second panel are bonded to each other in their

circumferential portions through a bonding layer made of a low-melting-point metal material.

27. (Original) The method for manufacturing a flat-type display according to claim 23, in which

the flat-type display is a cold cathode field emission display,

the first panel is an anode panel in which an anode electrode and a phosphor layer are formed, and,

the second panel is a cathode panel in which a plurality of cold cathode field emission devices are formed.

28. (Original) The method for manufacturing a flat-type display according to claim 23, in which

the flat-type display is a cold cathode field emission display,

the first panel is a cathode panel in which a plurality of cold cathode field emission devices are formed, and,

the second panel is an anode panel in which an anode electrode and a phosphor layer are formed.

29. - 46. (Canceled)

47. (Previously Presented) The flat-type display according to claim 1,

wherein the first panel comprises a substratum, a partition wall formed on the substratum between one phosphor layer and another phosphor layer, and a light absorbing layer formed between the substratum and the partition wall.

48. (Previously Presented) The flat-type display according to claim 1,

wherein the melting point of the low-melting-point metal material is 120° C to 400° C.

49. (Previously Presented) The flat-type display according to claim 1,

wherein the melting point of the low-melting-point metal material is 120° C to 300° C.

50. (Canceled)

51. (Previously Presented) The method for manufacturing a flat-type display according to claim 11, in which
the melting point of the low-melting-point metal material is 120° C to 400° C.

52. (Previously Presented) The method for manufacturing a flat-type display according to claim 11, in which
the melting point of the low-melting-point metal material is 120° C to 300° C.

53. - 56. (Canceled)

57. (Previously Presented) The flat-type display according to claim 1, wherein the second conductive material layer is disposed on the second end spacer surface and the second low-melting-point metal layer is in contact with and disposed between the second conductive material layer and second electrode member.